The committee recommends that each state should consider developing a comprehensive program for monitoring and inspecting chemical and petroleum product storage tanks with stringent design standards for all new tanks and a requirement for monitoring, testing, and upgrading existing tanks in important recharge areas.

Nonpoint Sources

The purposeful application of agricultural chemicals to land is distinct from most other sources of ground water contamination. Most of these chemicals are pesticides designed to be toxic to insect, fungal, and plant pests and are lawfully released into the environment for beneficial reasons. Besides ground water contamination, pesticides pose a threat to workers and to air and surface water quality.

The task of preventing pesticide contamination is made more difficult by the large number of pesticides in use and the wide range of chemicals and toxicological and environmental-fate characteristics displayed by these materials and the lack of information on their environmental fate and health effects. Thus, the committee has chosen to concentrate its recommendations on nonpoint source contaminants in this area.

- Pesticide Use Data Base States should maintain a data base on the spatial and temporal distribution of applied pesticides. Applicators could be required to report when, where, and how much of each pesticide is applied. Also useful are maps and summaries to indicate where such materials were applied.
- Registration Procedure for Certain Chemicals States should initiate a routine procedure for flagging pesticides that have potential for leaching into and contaminating ground water. Such a procedure should be based on the pesticide's chemical characteristics and other factors such as evidence of previous detection in ground water. States should consider canceling the registration of pesticides for which essential data have not been provided.
- Pesticide Tax to Fund Monitoring Monitoring should be used to ensure that currently registered, potentially leachable pesticides do not reach ground water. States should consider funding through fees paid for pesticides or their use. Such a program has two advantages: (1) a cost more reflective of the true cost of the pesticide is then paid by its users, and (2) there is economic incentive for the manufacturers to produce new pesticides that do not have the potential to leach into ground water.
- Cancellation of Pesticide Registration in Local Areas States that are reluctant to cancel the statewide registration for a potentially leachable pesticide should consider canceling registration in local areas where soil conditions or other factors indicate that pesticide leaching may be a serious problem.